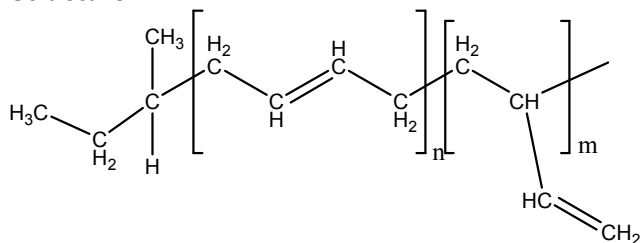


Sample Name: **Polybutadiene (1,2-rich microstructure)**
Sample #: **P19297-Bd**

Structure:



Composition:

Mn x 10 ³	PDI
3.1	1.10

PBd 1,4-addition	19 %
PBd 1,2-addition:	81 %

Synthesis Procedure:

1,2-addition polybutadiene was prepared by anionic living polymerization of butadiene in non-polar/polar media.

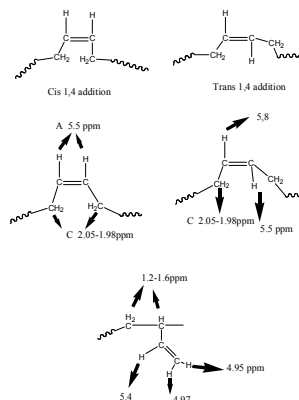
Characterization:

By GPC and HNMR. .

Microstructure: The ratio between 1,4- and 1,2-addition was calculated by ¹H NMR spectroscopy.

Solubility:

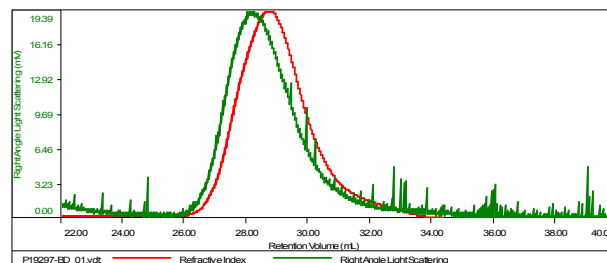
Polybutadiene is soluble in DMF, THF, toluene, hexane, cyclohexane and CHCl₃. It precipitates from methanol, ethanol and water.



SEC of Sample:

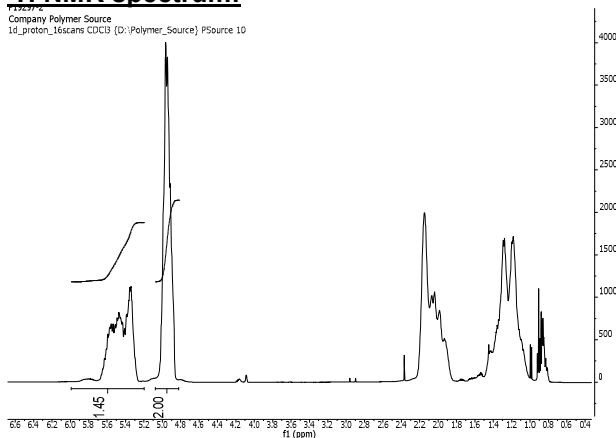
Sample ID: P19297-1-BdOH

Concentration (mg/mL)	29.9615
Sample dilution (mL/g)	0.1270
Method File	PS80K-Mb20-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19297-BD_01.volt	3,116	3,434	3,082	1.102	0.2019

¹H NMR spectrum:



FTIR spectrum:

